



MEMORANDUM

To: Robert Gulley, Colin McDonald
Texas CPA EGESM Division

Arturo Vale, David Hoth
US Fish and Wildlife Service
Clear Lake Ecological Services Field Office

From: Dr. Jacob Jackson
BIO-WEST, Inc.

Date: January 9, 2017

Re: Texas Conservation Plan for the Dunes Sagebrush Lizard – Change of Enrollment Values
in Monthly Reports

In December-2016, Bio-West (BW) submitted for review the December-2016 Monthly Report to the Comptroller of Public Accounts (CPA). Several of the reported values were updated between the November-2016 Monthly Report and the December-2016 Monthly Report which include; Gross Acreage Enrolled, Buffer Acres Enrolled, Totals (i.e. Gross Acreage Enrolled within Habitat Management Units), and several changes to Habitat Acres Enrolled. Additionally, the values reported in the December-2016 Monthly Report likewise were reported in the 2016 Annual Report. This memorandum is to formally notify the CPA and the Fish and Wildlife Service (FWS) of the changes.

Gross Enrolled Acreage was modified from 227,489.09 acres in November to 236,815.79 acres in December. Historic enrollment data in the TCP has come from multiple sources, for example; Participant submitted legal descriptions, Participant submitted shape files, Texas Habitat Conservation Foundation (THCF) Google Earth (.kmz) files, or AgriLife ESRI shapefiles. TCP program documents describe inaccuracies with regard to estimated acreage enrollment and verification as a result of the aforementioned data sources. However, documentation does not exist as to whether the issues were resolved. It was determined by BIO-WEST that the appropriate course of action was to report Gross Enrolled Acreage based on an internal records review of Certificate of Inclusion information and Participant invoices in 2016. This review consisted of the review of program documentation, and the use of legal descriptions of enrolled property (when available) as well as the Texas Land Survey GIS data from the Texas Railroad Commission to assess the accuracy of existing GIS representations of enrollment and correct any errors identified. One source of these inaccuracies that was found during the review was the use of Google Earth and the WGS 84 coordinate system to calculate acreage, as this is known to be



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less accurate than using a projected coordinate system (this also was a different coordinate system than typically used by AgriLife).

Buffer Acres Enrolled was modified from 28,808 acres in November to 20,011.70 acres in December. Upon closer inspection of Buffer Acres Enrolled it was discovered that the historic buffer GIS shapefile consisted of an error in which over-lapping buffer along HMU and county boundaries was twice represented and therefore over estimated buffer acreage. Removal of over-lapping buffer resulted in a more accurate representation of Buffer Acres Enrolled.

Several values were revised in December-2016 with respect to Habitat Acres Enrolled. The Very High category of Habitat Acres enrolled was modified from 33,454.21 acres in November to 33,665.53 acres in December, a change of 211.32 acres. The modified values were the result of an internal records review and spatially corrected Participant enrollment in HMU #16, changing from 12,472.18 acres reported in November to 12,683.50 acres reported in December.

The Very Low category of Habitat Acres enrolled was modified from 41,334.48 to 41,302.28 acres, representing a change of -32.20 acres. The change in acreage included .669 acres in HMU #5, representing a change from 6,250.68 to 6,251 acres and from -32.875 acres HMU #9, representing a change from 7,067.98 to 7035.10 acres. The modified values were the result of an internal records review and spatially corrected Participant enrollment.

Totals (i.e. Gross Enrolled Acreage within Habitat Management Units) were modified from 108,515.06 to 108,694.18 acres in the December report. The updated values for Totals resulted from an internal review of historic GIS data provided by AgriLife Extension and from corrections of over-lapping enrollment.

The December-2016 Monthly Report accounts for all enrollment changes in 2016. Enrollment changes for 2016 are as follows:

- Participant removed 818.20 acres of enrollment, 118.6 of which occurred in HMU #16 updated April-2016.
- Participant terminated enrollment of 234 acres, 83.1 of which occurred in HMU #16 updated July-2016.
- Participant enrolled an additional 32.92 acres in HMU #9 updated October-2016.

BIO-WEST will be sending a compilation of all enrollment descriptions, both spatial and tabular, to participants this month as an additional effort to ensure that program documents contain accurate and current descriptions of enrolled acreage and that such is correctly represented spatially in GIS as used in program activities. It is possible that additional revisions may occur consequent of this communication with participants, but they are not expected to be of large scale as current enrollment should be considered validated as presented to participants with their enrollment invoices (it is taken that concurrence is implicit in payment).



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